

THE CLAIMS

What is claimed is:

Sub B17 1. A blutable needle assembly comprising:
5 a needle component comprising a housing and a needle cannula mounted in the housing, the needle cannula having a sharp tip, wherein the housing defines a fluid chamber and an access port for fluid flow therethrough; and
a blunting component comprising a shuttle member and a blunting probe mounted on the shuttle member, the blunting probe having a blunt tip and a rearward open end;
10 wherein the blunting probe is disposed within the needle cannula and the needle component and the blunting component are configured for movement from a sharpened configuration to locking engagement in a blunted configuration; and
wherein the shuttle member is configured to extend outside the fluid chamber and to permit fluid flow from the open end of the blunting probe into the fluid chamber.
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Sub B17 2. The needle assembly of claim 1 comprising a tubular, non-perforated blunting probe.

Sub B17 3. The needle assembly of claim 1 comprising a detent and a stay, the detent being movable between (i) a locking position in which it may bear against the stay and prevent the needle assembly from moving to the sharpened configuration and (ii) an unlocked position which permits the needle assembly to move to the sharpened configuration.
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Sub B17 4. The needle assembly of claim 3 comprising a tubular, non-perforated blunting probe.
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Sub B27 5. The needle assembly of any one of claims 1, 2, 3 or 4 wherein the shuttle member defines a non-perforating cavity within which the blunting probe is mounted.
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Sub C27 6. The needle assembly of any one of claims 1, 2, 3 or 4 wherein the shuttle member is perforated to permit fluid flow from an open end of the blunting probe therein to the fluid chamber.

Sub B 47
7. The needle assembly of any one of claims 1, 2, 3 or 4 wherein the shuttle member comprises an extension connected to the blunting probe in a manner which permits fluid flow from the end of the blunting probe to the fluid chamber.

5 8. The needle assembly of claim 3 wherein the shuttle member comprises the movable
detent.

10 9. The needle assembly of claim 3 wherein the detent further comprises a coupling site
for engagement by an accessory device.

15 10. The needle assembly of claim 1 comprising a flash chamber.

Sub B 3
11. A blutable needle assembly comprising:
a needle component comprising a housing and a needle cannula mounted in the
housing, the needle cannula having a sharp tip; and
a blunting component comprising a shuttle member and a blunting probe mounted
on the shuttle member, the shuttle member defining a fluid chamber and an access port for fluid
flow, and the blunting probe having a blunt tip and a rearward end open to the fluid chamber;
wherein the blunting probe is disposed within the needle cannula and the needle
component and the blunting component are configured for movement from a sharpened con-
figuration to locking engagement in a blunted configuration.

20 12. The needle assembly of claim 11 comprising a tubular, non-perforated blunting
probe.

25 13. The needle assembly of claim 11 comprising a detent and stay, the detent being
movable between (i) a locking position in which it may bear against the stay and prevent the
needle assembly from moving to the sharpened configuration and (ii) an unlocked position
which permits the needle assembly to move to the sharpened configuration.

30 14. The needle assembly of claim 13 comprising a tubular, non-perforated blunting
probe.

Subau 15. The needle assembly of claim 13 wherein the shuttle member comprises the movable detent.

H.C. 1 5 16. The needle assembly of claim 11 wherein the detent further comprises a coupling site for engagement by an accessory.

17. The needle assembly of claim 11 comprising a flash chamber.